

**REMARKS**

Applicant appreciates the consideration given to the prior response and the corresponding withdrawal of the previous rejections. Applicant also notes with appreciation the indication of allowable subject matter in the objected-to claims 5, 6, 10-13, and 21-23. However, Applicant respectfully disagrees with examiner's various anticipation and obviousness rejections.

**The Corazza Anticipation Rejections**

Applicant disagrees with the examiner's assessment that "Corazza" (U.S. Pub. No. 2003/0133409) anticipates claims 1, 4, 7, 14, 15, 17, and 18. Particularly regarding independent claims 1 and 14, Applicant first directs the examiner's attention to amendments made in this response. In independent claim 14, the load indication is identified as being indicative of a reverse link loading. This change is consistent with claim 1, for example, and is amply supported by the filed application at paragraphs [0008], [0022], and [0023], for example.

In claim 1, the term "power headroom" is amended to read "power headroom threshold." Dependent claims 6 and 11 are likewise amended for consistency of terminology. The change updates the terminology of claim 1 to be consistent with the "power headroom threshold" terminology of original dependent claims 11, 12, and 13, and clarifies that claim 1 is directed to adjusting a mobile station's power headroom threshold like or similar to that claimed in independent claim 14, which referred to "power headroom threshold" as filed. The change is fully consistent with the filed application's Title, Summary, and Detailed Description, and with the relevant figures (5 and 6).

Corazza does not teach adjusting a mobile station's power headroom threshold, and cannot anticipate either of independent claims 1 and 14, or any of their dependent claims. Power headroom threshold is not the same thing as power headroom. Regarding transmissions from a mobile station, "power headroom" is simply the amount of reserve power available at the

mobile station. The actual power headroom of a mobile station at any given time thus can be understood as the difference between its current transmit power level and its maximum transmit power level.

In contrast, as paragraph [0007] in the instant application explains, a power headroom threshold specifies a minimum amount of power headroom to be reserved at a mobile station. That is, the power headroom threshold at issue in the claims is a value used by a mobile station to enforce or otherwise maintain a specified available reserve of additional transmit power, such as would be needed to carry out ARQ-related data retransmissions, where temporarily higher transmit powers may be used for data retransmissions. Example details are seen in paragraph [0030] and Fig. 5 of the instant application, where the mobile station increases the specified reserve of power headroom by lowering its power headroom threshold and decreases the specified reserve of power headroom by raising its power headroom threshold.

Corazza never teaches that there is a specified amount of power headroom to be maintained at a mobile station, and Corzza demonstrably does not teach or suggest the power headroom threshold limitations of claims 1 and 14. Indeed, the rejection argument itself makes clear that Corazza does not teach a mobile station that adjusts or otherwise varies a power headroom threshold responsive to receiving reverse link load indications. Specifically, the rejection observes that Corazza's mobile station adjusts its transmit data rate responsive to receiving indications of reverse link loading from a base station, and argues that those transmit data rate adjustments effectively adjust the mobile station's power headroom because changing transmit data rate changes the mobile station's transmit power.

Thus, as explained by the examiner, Corazza's mobile station transmit power is adjusted up or down, as needed, in response to changing load indications. Changing transmit power in that manner would indeed change the actual power headroom at the mobile station, but it also apparently demonstrates that Corazza's mobile station is taking no precautions to maintain a

particular amount of power headroom. In any case, indirectly changing power headroom in the mobile station of Corazza by changing the mobile station's actual transmit power has nothing to do with the claimed limitation of adjusting or varying a power headroom threshold as a function of reverse link loading.

For at least this reason, Corazza does not anticipate independent claims 1 and 14, or any of their dependent claims. Applicant therefore respectfully requests that all anticipation rejections be withdrawn.

The Corazza and Gopalakrishnann Obviousness Rejections

Dependent claims 2, 3, and 16 are rejected as obvious over the argued-for combination of Corazza and Gopalakrishnann (U.S. Pub. 2002/0110101). These rejections fail as a matter of law at least because Corazza and Gopalakrishnann, taken individually or in any combination, do not teach or suggest the limitations of the independent claims corresponding to claims 2, 3, and 16.

The Corazza and Lakkakorpi Obviousness Rejections

Dependent claims 8, 9 19, and 20 are rejected as obvious over the argued-for combination of Corazza and Lakkakorpi (U.S. Pub. 2003/0179704). These rejections fail as a matter of law at least because Corazza and Lakkakorpi, taken individually or in any combination, do not teach or suggest the limitations of the independent claims corresponding to claims 8, 9, 19, and 20.

The Corazza and Raaf Obviousness Rejections

Independent claims 24 and 25 are rejected as obvious over the argued-for combination of Corazza and Raaf (U.S. Pub. 2004/0029604). These rejections fail as a matter of law at least because Corazza and Raaf, taken individually or in any combination, do not teach or suggest the limitations of independent claim 24 or 25.

In more detail, Applicant amends claim 24 to correct its preamble to read "power headroom threshold" rather than just "power headroom." The body of claim 24 as filed correctly identified that the value being adjusted was a mobile station's power headroom threshold. According to claim 24, the power headroom threshold is adjusted based on counting the number of times the mobile station is power limited for retransmission of a frame.

Corazza includes no teachings related to the adjustment of a power headroom threshold, nor does Raaf. The rejection of claim 24 fails for at least that reason. Further, the cited sections of Raaf simply teach that the transmit power of a data portion of a transmission can be set based on the transmit power used for the last successful preamble transmission, or set based on incrementing transmit power upward while attempting preamble transmission, subject to a maximum count of preamble transmission attempts.

In contrast, claim 24 explicitly claims counting the number of times the mobile station is power limited for a retransmission of a frame and adjusting a power headroom threshold of the mobile station based on the count. Raaf does not count the number of times a mobile station is power limited—Raaf simply uses a counter to limit the power increases applied to preamble transmission. Raaf's counter therefore does not convey a count of the number of times that a mobile station is power limited for retransmission of a frame, nor does Raaf or Corazza teach or suggest adjusting any threshold, much less the claimed power headroom threshold, as a function of such a count. The obviousness rejection of claim 24 fails for this further reason.

Independent claim 25 is rejected on the same basis as claim 24. Claim 25 is an apparatus version of independent method claim 24, and the rejection of claim 25 fails for at least the same reasons as given for claim 24.

Closing

Applicant believes that all pending claims stand in condition for immediate allowance, and looks forward to the examiner's next correspondence. Further, the undersigned attorney would welcome the examiner's telephone call, should the examiner wish to discuss this response or any other aspect of this application.

Respectfully submitted,

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